AMENDMENTS TO THE CLAIMS

1. – 12. (Canceled)

13. (Currently Amended) A method for producing a purine nucleoside by fermentation comprising:

culturing a microorganism in a culture medium to produce and accumulate the purine nucleoside in the medium, and

collecting the purine nucleoside,

wherein the microorganism belongs to the genus *Escherichia* and is modified to block a reaction catalyzed by phosphoglucose isomerase in said microorganism,

wherein said microorganism produces an amount of purine nucleoside that is greater than the amount produced by the corresponding wild type microorganism, and

wherein said phosphoglucose isomerase is encoded by a gene obtainable by PCR amplification employing the primer pair of SEQ ID NO: 22 and SEQ ID NO: 23 and *Escherichia coli* chromosomal DNA as the template.

14. (Previously Presented) The method according to claim 13, wherein said microorganism is further modified to increase expression of a gene encoding an enzyme involved in purine nucleoside biosynthesis in said microorganism, wherein said enzyme involved in purine nucleoside biosynthesis is a phosphoribosyl pyrophosphate amidotransferase or a phosphoribosyl pyrophosphate synthetase.

15. (Previously Presented) The method according to claim 13, wherein said microorganism is further modified to deregulate control of an enzyme involved in purine

nucleoside biosynthesis in said microorganism, wherein said enzyme involved in purine nucleoside biosynthesis is a phosphoribosyl pyrophosphate amidotransferase or a phosphoribosyl pyrophosphate synthetase.

16. (Currently Amended) The method according to claim 15, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate amidotransferase and wherein control of said enzyme involved in the purine nucleoside biosynthesis is desensitized by desensitization of feedback inhibition arising from replacing at least one of the lysine residue at position 326 of the Escherichia *purF* gene product with a glutamine residue or the proline residue at position 410 of the Escherichia *purF* gene product with a tryptophan residue, said phosphoribosyl pyrophosphate amidotransferase being encoded by a gene obtainable by PCR amplification employing the primer pair of SEQ ID NO: 1 and SEQ ID NO: 2 and *Escherichia coli* chromosomal DNA as the template.

17. (Previously Presented) The method according to claim 14, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate amidotransferase.

18. (Previously Presented) The method according to claim 15, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate amidotransferase.

19. (Canceled)

20. (Previously Presented) The method according to claim 14, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate synthetase.

21. (Previously Presented) The method according to claim 15, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate synthetase.

22. (Previously Presented) The method according to claim 15, wherein control of said enzyme involved in the purine nucleoside biosynthesis is derepressed by inactivation of a purine repressor encoded by the *purR* gene from *Escherichia coli*.

23. – 24. (Canceled)

25. (Previously Presented) The method according to claim 13, wherein said microorganism is further modified to inhibit incorporation of a purine nucleoside into said microorganism by blockage of a reaction catalyzed by nucleoside permease.

26. – 28. (Canceled)

29. (Currently Amended) The method of claim 13, wherein said microorganism is further modified to block a reaction catalyzed by an enzyme selected from the group consisting of succinyl-adenosine monophosphate synthase, purine nucleoside phosphorylase, adenosine deaminase, inosine-guanosine kinase, guanosine monophosphate reductase, 6-phosphogluconoate ~~deydrase~~ dehydrase, adenine deaminase, and xanthosine phosphorylase, in said microorganism.

30. (Previously Presented) The method of claim 13, wherein said purine nucleoside is a purine nucleoside selected from the group consisting of inosine and guanosine.